



STATEMENT OF BASIS
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 BAQ Engineering Services Division

Company Name: Wilbert Plastic Services
Permit Number: 1880-0052-CR

Permit Writer: Michael G. Daugherty
Date: DRAFT

EXPEDITED REVIEW

DATE APPLICATION RECEIVED: November 10, 2015

FACILITY DESCRIPTION The facility is a thermoplastic injection molding facility located in Easley, South Carolina. The facility spray paints injection molded plastic parts. The molded parts are washed in a five stage washer and subsequently dried in a drying oven. Prime coat, base coat, and clear coat are applied in paint booths and the parts are passed through a cure oven to be dried.

PROJECT DESCRIPTION The facility is requesting a construction permit to install a new paint line, Paint Line No.2, with three water wash paint spray booths used for application of Prime coat, Basecoat, and Clear coat; the new booths will use robotic electrostatic paint guns. With the installation of these new paint booths, the facility will become a major source for volatile organic compounds (VOCs) and hazardous air pollutants (HAPs). Therefore, the facility is requesting a synthetic minor construction permit with a federally enforceable limit of less than 250 tpy for VOCs, PM, PM₁₀, and PM_{2.5} to avoid Prevention of Significant Deterioration (PSD) permitting for this project and being a minor source for PSD purpose. The facility will become subject to 40 CFR 63 Subpart PPPP upon startup of the new line. Upon start up the facility will be a major source for Title V and is required to submit a Title V application within 12 months of that start up.

SPECIAL CONDITIONS, MONITORING, LIMITS With this permit the facility will become major for title V and will also place federally enforceable limit of less than 250 tpy for VOCs, PM, PM₁₀, and PM_{2.5} to remain minor for PSD permitting.

EMISSIONS

UNCONTROLLED POTENTIAL EMISSIONS (PROJECT ONLY)				
ID	Pollutant	lb/hr	TPY	Method for Estimating Emissions
PB3	PM	17.530	76.782	Engineering Calculations using Emission Factors from South Coast Air Quality Management District
	PM ₁₀	11.921	52.212	
	PM _{2.5}	10.869	47.605	
	VOC	26.778	117.287	
	Toluene	3.745	16.403	Mass Balance
	Glycol Ethers	2.193	9.605	
	Xylene	5.605	24.552	
	Ethyl Benzene	1.910	8.366	
	MIBK	1.445	6.327	
	MEK	12.353	54.107	
	HDI	0.022	0.098	
	Cumene	0.006	0.026	
	Phenol	0.052	0.229	
	Naphthalene	0.010	0.043	
BB3	PM	17.530	76.782	Engineering Calculations using Emission Factors from South Coast Air Quality Management District
	PM ₁₀	11.921	52.212	
	PM _{2.5}	10.869	47.605	
	VOC	26.778	117.287	
	Toluene	3.745	16.403	Mass Balance
	Glycol Ethers	2.193	9.605	
	Xylene	5.605	24.552	
	Ethyl Benzene	1.910	8.366	
	MIBK	1.445	6.327	
	MEK	12.353	54.107	
	HDI	0.022	0.098	
	Cumene	0.006	0.026	
	Phenol	0.052	0.229	
	Naphthalene	0.010	0.043	



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UNCONTROLLED POTENTIAL EMISSIONS (PROJECT ONLY)

ID	Pollutant	lb/hr	TPY	Method for Estimating Emissions
CB3	PM	17.530	76.782	Engineering Calculations using Emission Factors from South Coast Air Quality Management District
	PM ₁₀	11.921	52.212	
	PM _{2.5}	10.869	47.605	
	VOC	26.778	117.287	
	Toluene	3.745	16.403	Mass Balance
	Glycol Ethers	2.193	9.605	
	Xylene	5.605	24.552	
	Ethyl Benzene	1.910	8.366	
	MIBK	1.445	6.327	
	MEK	12.353	54.107	
	HDI	0.022	0.098	
	Cumene	0.006	0.026	
	Phenol	0.052	0.229	
	Naphthalene	0.010	0.043	
CB3(Flash Tunnel)	VOC	0.301	0.318	Mass Balance
	Toluene	0.042	0.184	
	Glycol Ethers	0.025	0.108	
	Xylene	0.063	0.276	
	Ethyl Benzene	0.021	0.094	
	MIBK	0.016	0.071	
	MEK	0.039	0.608	
	HDI	0.000250	0.001	
	Cumene	0.00000667	0.000292	
	Phenol	0.000586	0.003	
	Naphthalene	0.000110	0.000482	
OVN (Two, 4.4 MMBtu/hr Burners)	PM	0.032	0.140	AP-42 Fifth Edition, Tables 1.4-1,-2, 7/98 Update
	PM ₁₀	0.032	0.140	
	PM _{2.5}	0.032	0.140	
	SO ₂	0.002	0.0088	
	NO _x	0.432	1.892	
	CO	0.362	1.586	
	VOC	0.024	0.102	
OVN	VOC	9.026	39.535	Mass Balance
	Toluene	1.262	5.529	
	Glycol Ethers	0.739	3.238	
	Xylene	1.889	8.276	
	Ethyl Benzene	0.644	2.820	
	MIBK	0.487	2.133	
	MEK	4.164	18.238	
	HDI	0.008	0.033	
	Cumene	0.002	0.009	
	Phenol	0.018	0.077	
	Naphthalene	0.003	0.014	

UNCONTROLLED POTENTIAL EMISSIONS (PROJECT ONLY)

ID	Pollutant	lb/hr	TPY	Method for Estimating Emissions
PB3	PM	0.175	0.768	Engineering Calculations using Emission Factors from South Coast Air Quality
	PM ₁₀	0.119	0.522	



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UNCONTROLLED POTENTIAL EMISSIONS (PROJECT ONLY)

ID	Pollutant	lb/hr	TPY	Method for Estimating Emissions
	PM _{2.5}	0.109	0.476	Management District Control Efficiency is 99.0%
BB3	PM	0.175	0.768	Engineering Calculations using Emission Factors from South Coast Air Quality Management District Control Efficiency is 99.0%
	PM ₁₀	0.119	0.522	
	PM _{2.5}	0.109	0.476	
CB3	PM	0.175	0.768	Engineering Calculations using Emission Factors from South Coast Air Quality Management District Control Efficiency is 99.0%
	PM ₁₀	0.119	0.522	
	PM _{2.5}	0.109	0.476	

FACILITY WIDE EMISSIONS

Pollutant	Uncontrolled Emissions	Controlled/Limited Emissions
	TPY	TPY
PM	537.651	<250
PM ₁₀	365.770	<250
PM _{2.5}	333.543	<250
SO ₂	0.041	N/A
NO _x	6.914	N/A
CO	5.807	N/A
VOC	859.08	<250
Toluene	114.530	N/A
Glycol Ethers	70.320	N/A
Xylene	179.751	N/A
Ethyl Benzene	61.249	N/A
MIBK	46.323	N/A
MEK	396.136	N/A
HDI	0.688	N/A
Cumene	0.175	N/A
Phenol	0.1627	N/A
Naphthalene	0.289	N/A
Single HAP	179.751	N/A
Total HAP	871.08	N/A

OPERATING PERMIT STATUS

The facility will apply for new Title V permit within one year from startup of this project.

REGULATORY APPLICABILITY REVIEW

Regulation	Comments/Periodic Monitoring Requirements
Section II.E - Synthetic Minor	The facility currently is a Conditional Major facility and after the startup of this construction permit they will be a Title V facility and will have federally enforceable limits of less than 250 tpy for VOCs, PM, PM ₁₀ , and PM _{2.5} to avoid PSD permitting. The facility will be a minor source for PSD.
Standard No. 1	The project does not have any indirect fired fuel burning sources.
Standard No. 3 (state only)	The project will not have any waste combustion/reduction processes.
Standard No. 4	The spray booths and the oven will be subject to 20% opacity and weight rate limits.
Standard No. 5	The facility was not in existence in 1979 or 1980.
Standard No. 5.2	The total Btu/hr rating for the burners in the oven is 4.4 MMBtu/hr which is less than the standard of 10MMBtu/hr therefore the standard does not apply.



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Regulation	Comments/Periodic Monitoring Requirements
Standard No. 7	The facility is requesting limits of less than 250 tpy for VOCs, PM, PM ₁₀ , and PM _{2.5} to avoid PSD permitting.
61-62.6	The project will not emit any fugitive PM emissions.
40 CFR 60 and 61-62.60	Subpart TTT does not apply since the facility does not paint plastic parts for business machines.
40 CFR 61 and 61-62.61	The facility does not emit the pollutants subject to this standard (asbestos, benzene, beryllium, coke oven emissions, arsenic, mercury, radio nuclide, radon, or vinyl chloride).
40 CFR 63 and 61-62.63	The facility with this permit will be a major source of HAPs at startup of the new line. At the time of start up the facility will become subject to Subpart PPPP.
61-62.68	The facility does not use or store chemicals subject to 112(r) in quantities above applicable thresholds.
40 CFR 64	Emissions from the sources are less than major source threshold therefore CAM will not apply.

AMBIENT AIR STANDARDS REVIEW

Regulation	Comments/Periodic Monitoring Requirements
Standard No. 2	The facility has shown compliance through modeling dated November 25, 2015.
Standard No. 7.c	There have been no baselines set for Pickens County.
Standard No. 8 (state only)	The facility will be subject to Subpart PPPP therefore a compliance demonstration is not required.

PUBLIC NOTICE

This construction permit will undergo a 30-day public notice period to establish synthetic minor limits in accordance with SC Regulation 61-62.1, Section II.N. This permit was placed on the SCDHEC Public Notice Website on December 9, 2015. The comment period was open from December 9, 2015 to January 7, 2016.

SUMMARY AND CONCLUSIONS

It has been determined that this source, if operated in accordance with the submitted application, will meet all applicable requirements and emission standards.